

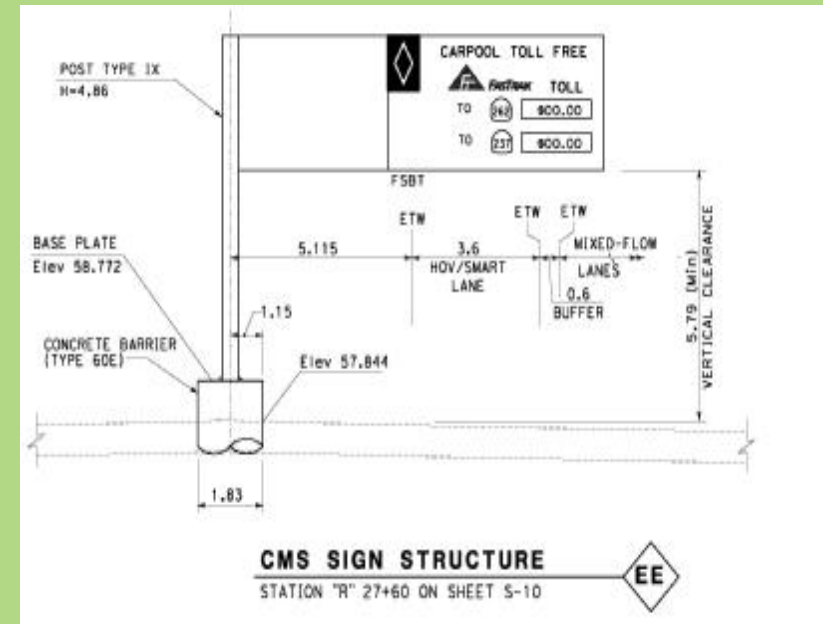
Regional HOT Lanes Study Preliminary Findings

Metropolitan Transportation Commission
Planning Committee

December 8, 2006



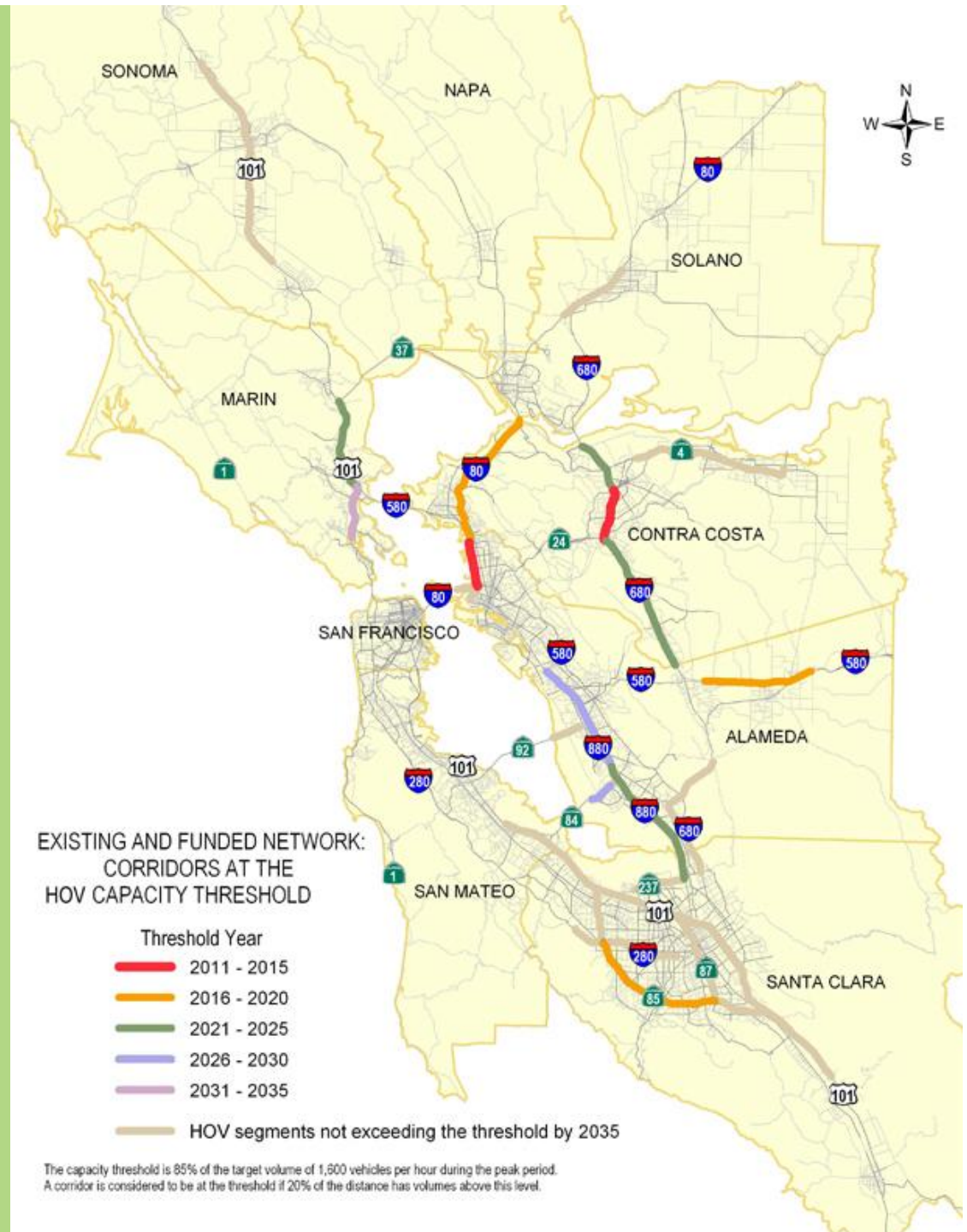
A Proven Concept



San Diego
Orange County
Houston
Minneapolis
Denver

HOV lanes
will become
crowded
over time

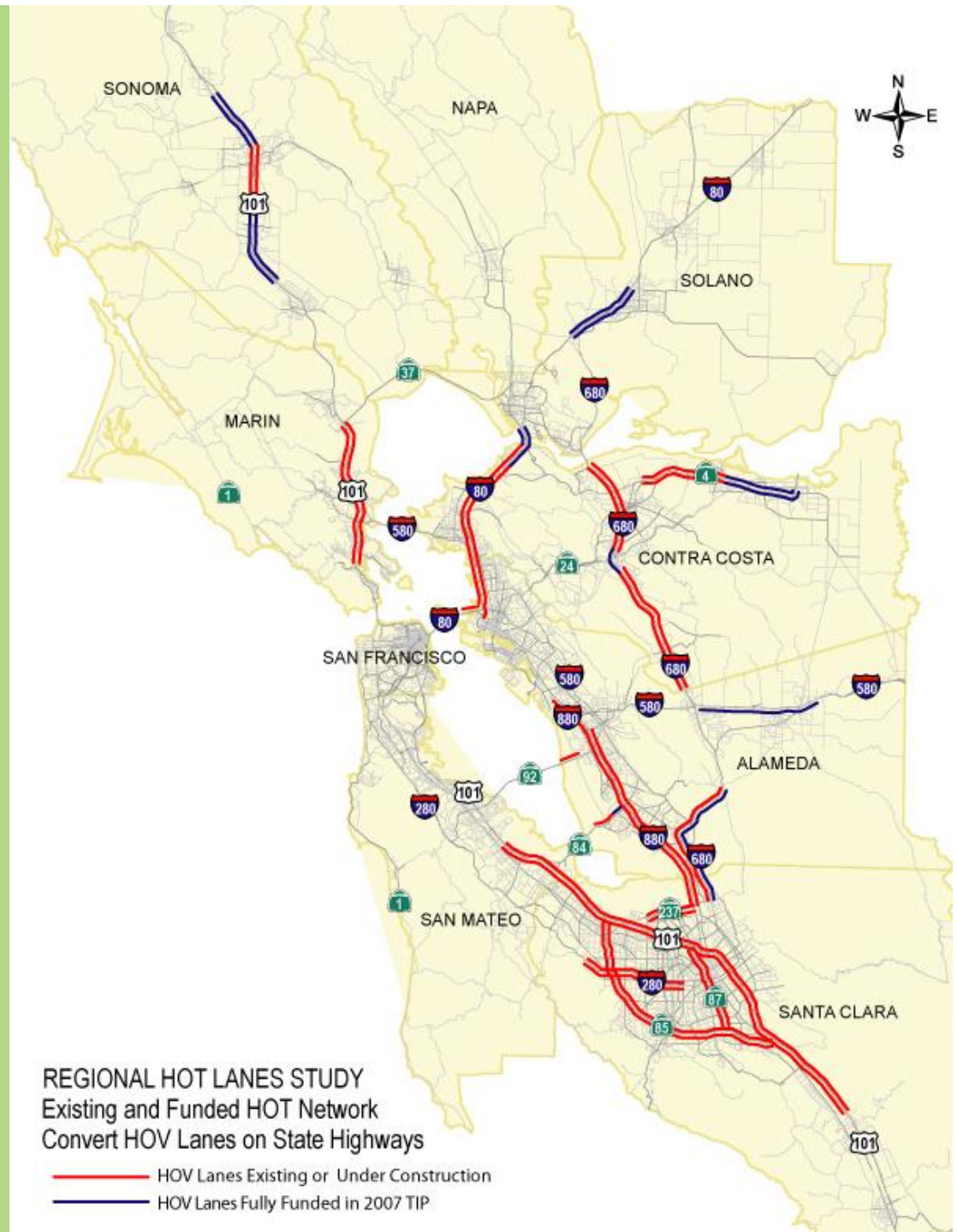
but not as
soon as we
thought



HOT Lane Networks Under Study

1 Existing & Funded Network

Convert HOV lanes that exist, are under construction or are fully funded



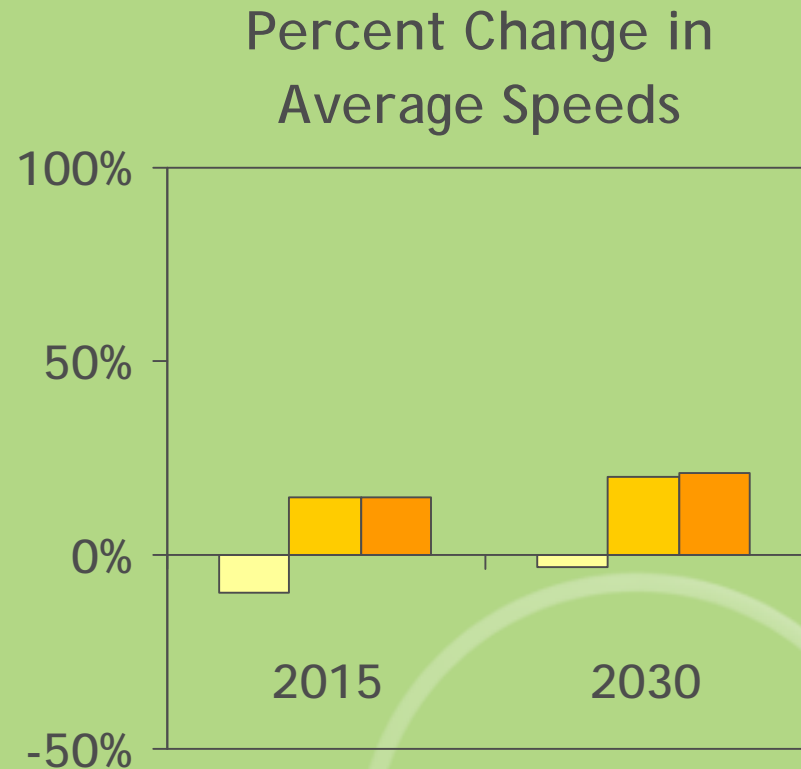
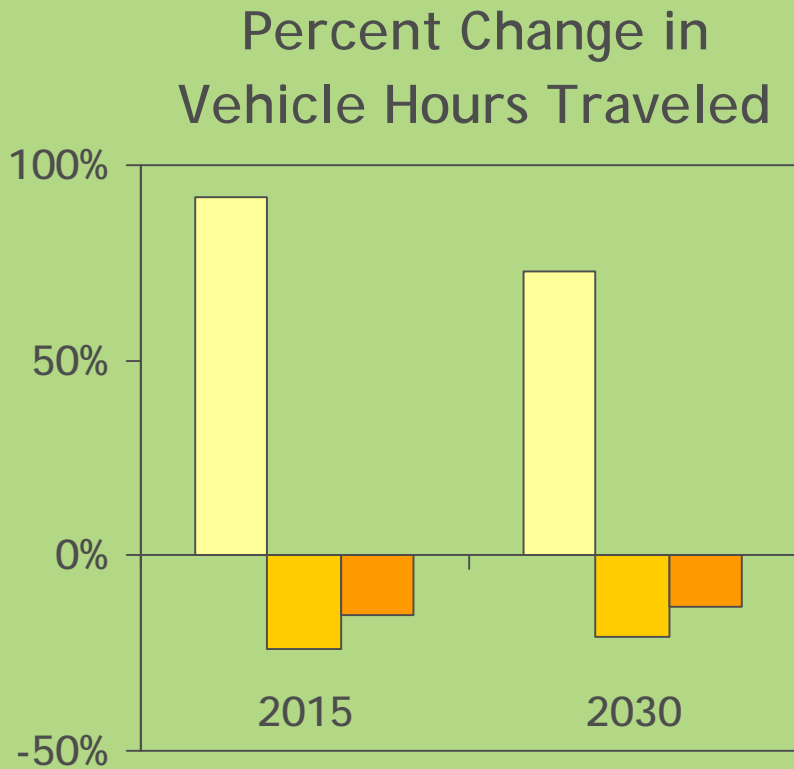
HOT Lane Networks Under Study

2 Connected Network

Fill gaps and extend the system



Traffic Impacts of HOT Network (Compared to HOV-Only Network)



Peak Hour Performance



HOV/HOT Lanes



Mixed Flow Lanes

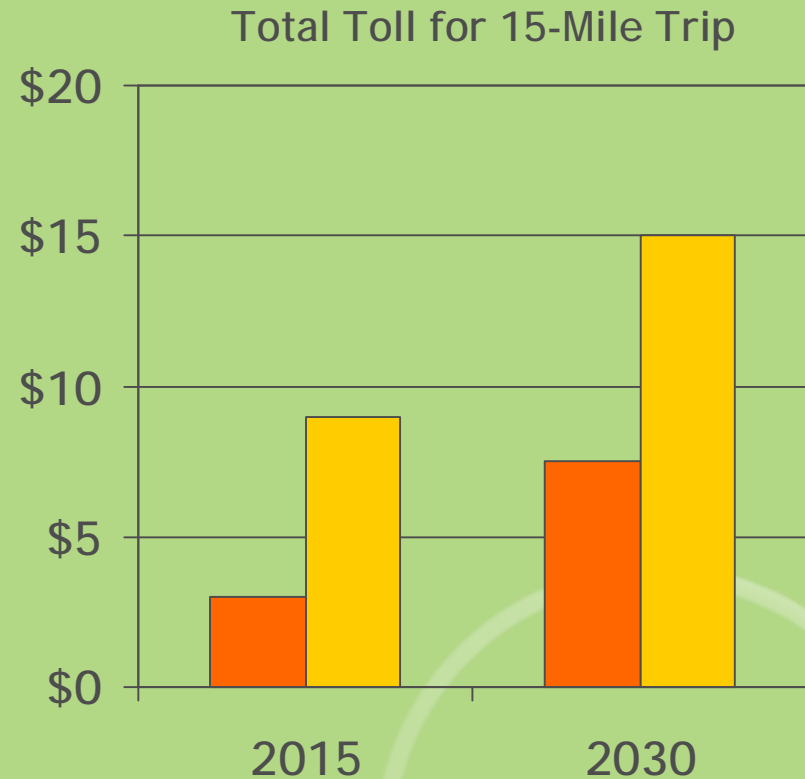
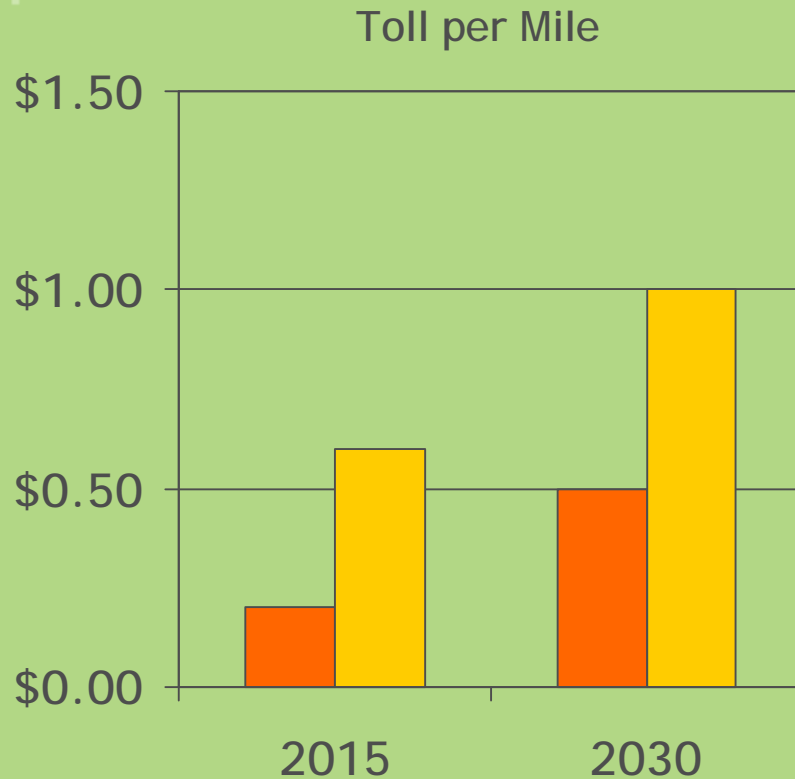


Total, All Lanes

Note:

Figures for 2015 are for Existing and Funded Network; figures for 2030 are for Connected Network

Typical Peak Period Tolls



For peak direction of travel

Less Congested (low end of range)

More Congested (high end of range)

Note:

Figures for 2015 are for Existing and Funded Network; figures for 2030 are for Connected Network

Capital Costs

- Cost to convert HOV lanes to HOT lanes (depends on paved right-of-way)
 - u Low: \$1.4 million per mile
 - u Medium: \$2.2 million per mile
 - u High: \$3.7 million per mile
 - Total capital cost
 - u Existing and Funded Network: \$1.2 billion
 - u Expansion to Connected Network*: \$3.5 billion
- * Above and beyond Existing and Funded Network;
includes cost of widening to fill gaps in the HOV/HOT system

Costs and Revenue

1 Existing & Funded Network (2006\$)*

30-Year Revenue	\$3.8 to \$5.6 billion
30-Year Cost	\$1.5 billion
30-Year Net Revenue	\$2.3 to \$4.1 billion

* Present discounted value between 2015 and 2030; 4% real discount rate

2 Connected Network (2006\$)

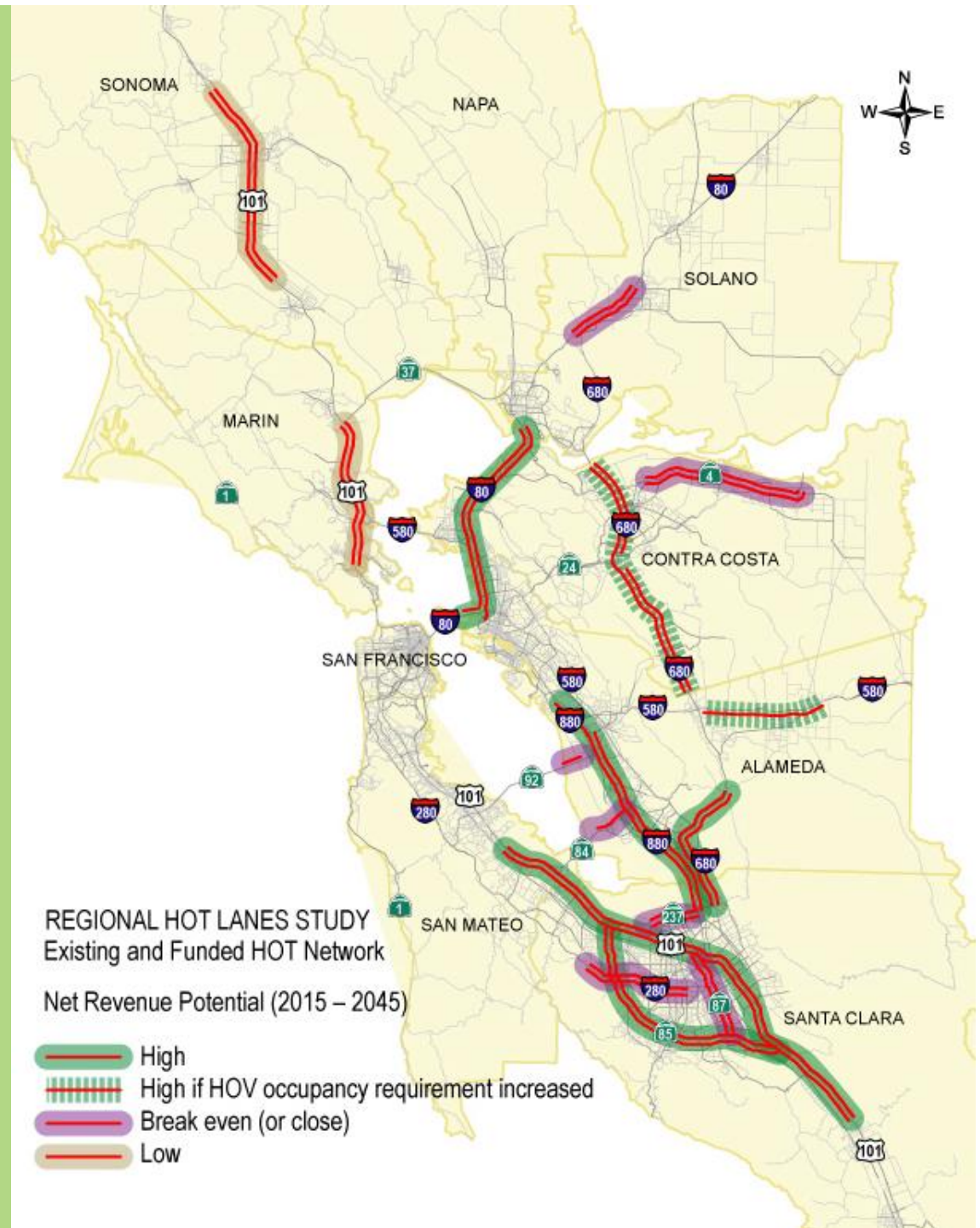
Incremental Capital Cost**	\$3.5 billion
30-Year O&M Cost***	\$1.7 billion

** Cost beyond that for Existing and Funded Network, for year 2030 only

*** Present discounted value; assumes 4% real discount rate

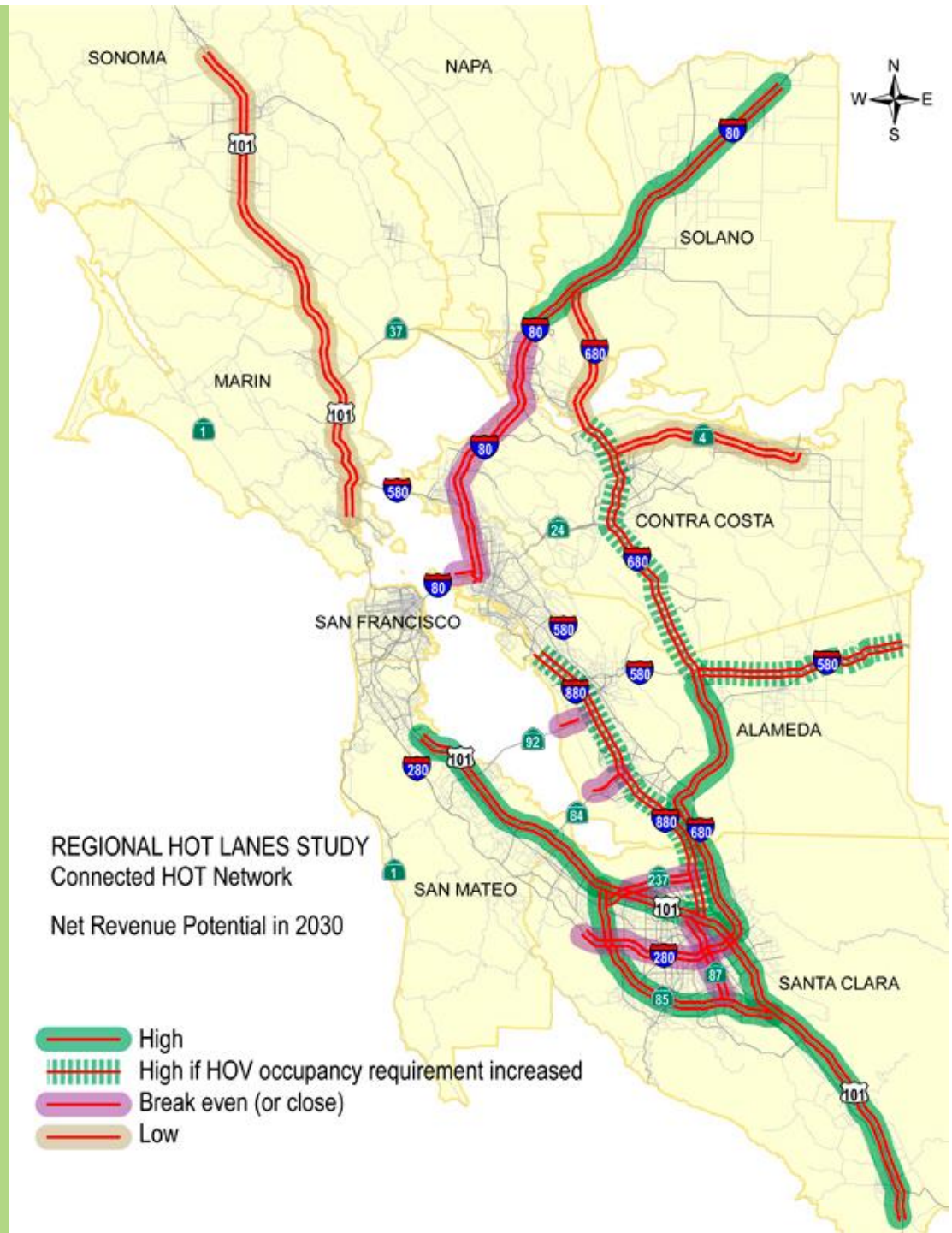
Net Revenue Potential

1 Existing & Funded Network



Net Revenue Potential

2 Connected Network



Key Policy Considerations

- Governance and revenue allocation
- Tolling policies
 - u Open process to set tolls
 - u Eligibility for free trips (HOV occupancy)
 - u 24/7 or limited hours
- Design Principles and Access Locations
- Equity
 - u Income
 - u Geography
 - u Modes

